Overcoming Adversity:
Child Maltreatment, School Success, and Transitions to the Workforce

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Introduction

Maltreated children are at risk for many social, cognitive, and emotional problems, including problems at school. Because school performance is predictive of later career success, it is critical for society to improve maltreated children's academic learning. All children are required to attend school, and thus schools provide a unique opportunity to help maltreated children overcome adversity and transition successfully into the workforce. School-based intervention, in addition to early, home-based intervention, is vital not only for maltreated children themselves but also for society at large in our effort to prevent mental health problems, substance abuse, and crime.

Child maltreatment is a pervasive form of violence that is adversely associated with children's cognitive development, mental health, and economic success. Victims of child abuse are at increased risk for such unfortunate outcomes in adulthood as depression (Boudewyn & Liem, 1995), substance abuse, dissociative tendencies (Kendall-Tackett, Williams, & Finkelhor, 1993), crime (Widom & Ames, 1994), cognitive deficits (Hoffman-Plotkin & Twentyman, 1984) and school delays (Eckenrode, Laird, & Doris, 1993). Each year, approximately 3 million cases of child maltreatment are reported to child protective services (CPS) nationwide, with approximately 1 million of the cases substantiated (NCCAN, 1999). Survey research makes it clear that reports to CPS reflect only a small percentage of all child abuse and neglect cases (e.g., Finkelhor, 1979; Gelles & Straus, 1987).

In 1992, federal dollars spent on child maltreatment research totaled $14.2 million; in contrast, for cancer federal dollars spent totaled $2.3 billion. In terms of dollars spent on lives lost, for cancer it was $794, AIDS $697, heart disease $441, and child maltreatment a mere $31 (Byron Egeland).[1] In 1999, about 1,221,800 new cancer cases were expected to be diagnosed (American Cancer Society, 1999); however, about the same number of child maltreatment cases were expected to be substantiated. Given the ubiquitous personal and societal costs of child maltreatment, this imbalance in funding is remarkable. And the imbalance appears to be growing.

The recent closure of the National Center on Child Abuse and Neglect (NCCAN) has left a substantial funding gap for research on predictors of, consequences of, and intervention for child maltreatment. The new Office on Child Abuse and Neglect (OCAN) has virtually no discretionary funds. The National Institute on Child Health and Human Development (NICHD) is attempting to support a few, selected areas of research (e.g., child neglect, definitional issues) but is not broadly focused on child maltreatment research. The National Science Foundation is in an excellent position to fund state-of-the-art, innovative, high-quality research on this crucial multidisciplinary area of study.

Conference Goals

One understudied topic within the field of child maltreatment concerns school performance and life transitions, including the transition from school to college or work. A major goal of our conference was to review current knowledge of relations among child maltreatment, school performance, and career choice, and identify important areas in need of research.

Within that major goal, another conference purpose was to bring together researchers from different traditions and disciplines who could discuss child maltreatment and school or work success. The different traditions represented included: 1) child maltreatment/family violence research; 2) longitudinal developmental studies; and 3) adolescent career choice or school-to-work transition research. Scientists who investigate child abuse and neglect have not generally concentrated on major transitions in children's lives or school-to-work transitions. As Graber and Brooks-Gunn (1996) point out, however, understanding how individuals navigate developmental transitions is a central part of understanding risk and resilience across the life span,

and many child abuse researchers are explicitly concerned with risk and resiliency. Moreover, scientists with expertise in the study of adolescent transitions have not generally examined child maltreatment as an important determinant of faltering life progression (Emmy Werner). There was thus a need to bring professionals with these different perspectives and training together. Relatedly, researchers in different disciplines had not heretofore had a formal chance to discuss child maltreatment and the transition from school to college or work. The different disciplines represented at our conference included developmental psychology, education, sociology, medicine, clinical psychology, and social work. Representatives from each discipline provided important information, and their participation satisfied this conference goal.

Theoretical issues abound within the context of child maltreatment research, including in the study of maltreated children's transitions and school success. A third important goal of the conference was to explore theoretical issues raised by attachment theory (Byron Egeland), cognitive-developmental theory (Catherine Ayoub & Kurt Fischer), developmental-contextual theory of career development (Vondracek, Lerner, & Schulenberg, 1983), and other theories relevant to academic and vocational success. Issues of "social capital" were also addressed in relation to at-risk and maltreated children.

To return to the main goal of the conference, as mentioned, we sought to determine what is known about school performance and career choice in maltreated and other at-risk children (e.g., children who have witnessed domestic violence; Robert Hampton; Penelope Trickett). One potential way for children to overcome adversity is through positive experiences outside the home, and specifically in school. For instance, in principle, schools can help maltreated children gain intellectual and social skills, acquire supportive friends and mentors, obtain eventual economic success through meaningful employment and higher education, and build self esteem. Yet school too often represents a forum for failure in children from abusive backgrounds. In the conference, we thus discussed current research findings on maltreated and at-risk children's school performance (including in academic and social areas; e.g., Jeffrey Leiter; Penny Trickett) and interventions to promote school success (David Stern). In regard to the latter, the school-to-work transition movement within the field of education illustrates one possible intervention to bolster maltreated children's chances of successful transitions to the workforce. This movement represents a recent trend for students to acquire skills and knowledge related to broad occupational fields or industries (e.g., finance, aviation, agricultural sciences) while in high school. At the conference, we discussed evaluations of these school programs, which have indicated substantial success, including with at-risk children (David Stern). Research on important processes of career development and on the childhood and adolescent precursors of eventual career choices and outcomes was also addressed at the conference, as were programs designed to facilitate children's and adolescents' development of industry, vocational identity, and effective career choice behaviors (John Krumboltz; Fred Vondracek).

Conference Themes

A number of common themes emerged during the course of the presentations and discussions. These themes pointed to key issues that span the fields of child maltreatment, education, and transition to the workforce, and revealed critical questions awaiting answers.

Academic Performance and Transition to Work in Maltreated Children

Although prior research indicates that maltreated children are at risk for poor academic performance, the extent of the risk remains unknown, especially in regard to the transition from high school to college or work. Nor is it known how various forms of maltreatment that occur during different developmental phases affect children's academic performance.

Maltreatment that occurs before school age can have lasting effects on academic performance, and these sequelae may affect the transition to work. In Byron Egeland and colleagues' longitudinal study of at-risk (including maltreated) children, by third grade, 78% of the maltreated children and 56% of the non-maltreated but still high-risk children were receiving some type of special education instruction. By the end of high school, 53% of the maltreated children had dropped out of school, although only 18% of the non-maltreated children had done so. Thus, despite the abuse occurring early in childhood, negative consequences lasted at least to the point at which these children would normally transition into the workforce.

Penelope Trickett is conducting a longitudinal study of girls with and without a history of child sexual abuse that occurred between the ages of 6 and 12 years. Although sexual abuse did not predict grades in late childhood and early adolescence, sexual abuse experiences were predictive of school avoidance and a lack of social competence. Girls with a history of sexual abuse were more likely to have behavior problems in adolescence, and to be less well liked by their peers and teachers, less sociable, and more likely to skip school than were girls with no history of sexual abuse. Clearly such behavior patterns may, over time, affect school and work performance.

Although maltreated children are at risk for poor school performance, the exact nature of relations between maltreatment and academic accomplishment need to be specified. For instance, do the effects of maltreatment vary based on the age at which maltreatment occurs? Further, the mechanisms underlying the effects of maltreatment on academic achievement have yet to be articulated. For instance, perhaps maltreated children's poor performance stems from difficulties in establishing relationships with others (e.g., teachers, students) which inhibits maltreated children from feeling comfortable and attending class. Cognitive or attentional deficits (e.g., lower IQ, poorer verbal skills), emotional problems (e.g., dissociative tendencies), or motivational deficits (e.g., less initiative, poor self-concept) may also contribute to poorer academic outcomes for maltreated children.

Very little is known about how maltreated children fare when transitioning from school to work or college or about the vocational identity development of these at-risk children, although one would predict difficulties because maltreated children oftentimes perform more poorly than non-maltreated children in school. Given the importance of this particular life transition for successful entry into adulthood (as opposed to an unsuccessful life of welfare reliance or crime), it remains critical to document more clearly how maltreated children navigate the transition from school to work.

Summary Points

- Maltreated children are at a disadvantage in school, but the reasons and mechanisms are not well

understood.

- Different forms of maltreatment are likely to cause different deficits in school, but more research is necessary to understand the effects of specific forms of maltreatment and how these effects may differ for children of different ages.

- The transition of maltreated children from school to work is little understood. However, it is of great interest to society. Large numbers of children are maltreated, and their difficulties launching successful careers are also difficulties for society, in wasted potential, personnel shortfalls, and often increased crime.

Attributions and Perceptions

One of the primary themes of the conference concerned the importance of understanding children's attributions and self-perceptions, particularly as these processes relate to academic performance and careers for maltreated and at-risk youth. For instance, when asked to describe themselves, maltreated adolescents tend to identify a higher proportion of negative characteristics as central to their core self than do non-maltreated adolescents. Additionally, these personal negative-attributional biases of maltreated adolescents refer more often to stable characteristics; in contrast, negative self-descriptions of non-maltreated adolescents tend to be situationally specific (Catherine Ayoub). Maltreated children also have limited and narrow perceptions of their futures (general negative-attributional biases), as do children from other high-risk populations (e.g., minority children living in poor neighborhoods) (Catherine Ayoub, Robert Hampton). Thus, rather than planning for the future, maltreated and at-risk children instead often focus on day-to-day reality and the immediate future. Focusing solely on the present, although perhaps pragmatic for immediate survival, may have negative consequences in the long term.

Despite evidence of a negativity bias among maltreated children, numerous important questions remain regarding maltreated children's attributions and perceptions, highlighting the need for continued research. For one, although negativity biases are clearly evident in adolescents, too little is known about the development of negative attributional processes in maltreated children, such as the nature of precursors to these biases that may be evident in younger children (but see Dodge, Bates, & Pettit, 1990), whether the attributions emerge gradually, and how to change a child's budding or more entrenched negative attributions. Understanding the developmental time course of maltreated children's attributions will be critical for designing intervention strategies aimed at improving children's perceptions of themselves and their futures. Also, although such attributions are evident, little is known about their effects on children's perceptions of their competence in specific domains, such as school. Nor is there adequate knowledge regarding maltreated children's perceptions of their future specifically in relation to work, including in children's perceptions of their ability to be successful. Motivating maltreated children to exert effort academically may not be possible without an understanding of their perceptions of themselves, their capabilities, and their futures.

Summary Points

- Negative attribution biases impede the progress of maltreated children, yet too little is known about how or when these biases form.

- These attributional biases are personal (e.g., negative self-descriptions) and general (e.g., believing that the future does not hold promise, or that there will be no future).

- Personal negative-attributional biases contribute to low self-esteem and feelings of low self-efficacy.

- General negative-attributional biases may cause maltreated children to fail to consider their futures fully, and therefore not to make long-range plans.

- Belief in one's self and an ability to be optimistic about the future are vital to career planning and success.

- Further research is needed to understand the formation of these negative attributional biases, and how they can best be counteracted or prevented.

- Further research is also needed on how negative attributional biases affect career identity development and career aspirations.

Social Relationships

A third, dominant conference theme concerned the importance of social relationships. The establishment and maintenance of warm, supportive close relationships are essential to health and well-being across the life span. Such relationships foster social and cognitive development early in life. They influence academic performance as well as teacher and peer relationships, and they facilitate adjustment during and after life transitions.

Many maltreated children typically lack such positive close relationship experiences with their caregivers. For instance, in a longitudinal study, Byron Egeland reported that insecure attachment relationships were significantly more common in physically abused and neglected toddlers (e.g., 12- 18 months of age) than in non-abused toddlers, despite all of the children in his study being considered at-risk (e.g., teenage mothers, low family income). When toddlers of psychologically unavailable parents were examined, a large percentage was classified as anxious-avoidant. When the sample of children was observed in preschool, the maltreated children had considerable difficulty interacting with their mothers to complete various tasks; in fact, they performed worse with their mothers than when they were alone. In normal samples, the presence of the mother commonly boosts a child's performance, allowing the preschooler to perform better than when alone. However, the fact that maltreated children's performance was poorer when the mother was present indicates that instead of having the usual beneficial effect, the mother's presence was detrimental to the child's performance. To the extent that these types of findings generalize to other adult figures (e.g., teachers), the implications for school performance are especially daunting.

Social relationships can also serve as a protective force, moderating many of the negative consequences associated with maltreatment. Specifically, when supportive warm relationships are formed, for instance, with non-abusive caregivers, teachers, or other adult role models, these relationships can facilitate long-term recovery from childhood maltreatment (Emmy Werner). In school, close relationships between teachers and students, small classrooms, and multi-year classes with the same teachers and students help establish warm, supportive relationships, improve children's academic performance, and facilitate children's transition to the workforce (David Stern). Finally, mentoring itself can be a powerful influence on children's performance in school and their ability to transition successfully from high school to college or work (David Stern).

Despite recognition of the importance of social relationships, little is known about how maltreated children's perceptions of and prior experiences in close social relationships affect their interactions with adult figures, such as teachers. Similarly, little is known about how relationships with teachers shape maltreated children's perceptions of other social relationships. Furthermore, although insecure attachment relationships are more common in maltreated than non-maltreated children, the long-term developmental consequences of these relationships in the domains of school and work need further study.

Summary Points

- Maltreated children have greater difficulty than other children in forming social relationships.

- This difficulty is likely to hinder maltreated children in adjustment with peers at school and also at work.

- Difficulty with social relationships also disadvantages maltreated children in forming mentoring or supportive relationships with authority figures, such as teachers and supervisors.

- Research suggests that altering various factors of the school situation (e.g., smaller class sizes, more years with a teacher) may help facilitate the formation of social relationships. Unfortunately, these changes have not been tested systematically so the relative contributions of each factor are unknown.

- More research is necessary to determine which school changes have the most positive effects, and how changes could be implemented on a larger scale.

Consequences of Current Interventions

A fourth theme to emerge from the conference involved the need to understand more precisely the consequences of current societal responses to maltreatment. Responses can include foster care, legal intervention (e.g., a criminal court case to punish the perpetrator or a juvenile court case to remove the child temporarily from home), counseling, termination of parental rights, and the like. Each of these responses, although designed to protect children from further harm, may influence children's adjustment and well-being in important, but poorly understood ways (Gail Goodman; Desmond Runyan). Jeffery Leiter, for example, presented evidence that suggested a decline in maltreated children's academic participation and achievement following a report to Child Protective Services (CPS). The trajectory of the decline was such that, instead of indicating a tendency for the maltreated child to recover, it indicated that the decreases in school performance would grow larger with time. Because the decline began almost immediately after the CPS report, and because there is often a delay between abuse and reporting, the decline may partly reflect the negative consequences of being involved in an abuse case, as well as the effects of abuse itself. One way the CPS report may cause additional problems for an abused child is by causing great disruption in the child's life (e.g., removal from the home or intensified pressure in the home). A large disruption in the living situation, attendant repercussions from family stress, and placement in a non-optimal foster home, could well contribute to academic decline. A greater understanding of the consequences of societal involvement is necessary to promote children's well-being, including their academic performance.

On a more general level, it is important to advance understanding of other intervention strategies for maltreated and at-risk children. Several intervention strategies have been developed to facilitate at-risk children's participation in school, academic performance, and transition to college or the workforce. One increasingly well-known intervention involves "career academies," school environments in which students focus on particular careers or industries, such as health care. Additional research is needed to evaluate the consequences of these academic intervention programs on: a) children's school performance; b) children's ability to transition successfully to school or work; and c) children's more general well-being, including social competence.

Additionally, an extension of the academies to lower grades may be useful, although academic choices and experiences must still remain flexible. Research indicates that children's ideas about and aspirations for work develop much earlier than high school (Fred Vondracek). However, career academy programs typically take place during the high school years. Thus, how career academies' utility interacts with children's understanding of work and careers needs to be specified.

Finally, despite the existence of some preliminary support for the efficacy of career academies, the nature of those effects must be specified in greater detail. For example, in these academies class sizes are sometimes small and instructors remain with children during the course of several years, and help children find mentor programs and employment opportunities. Although some success has been reported for the academies overall, the effects of any one factor, and the interactions between factors remain unknown. As a result, the benefit, if any, of the career instruction itself is unknown. Finally, the generalizability of career academy benefits to different groups of children, including maltreated children, must be examined. In short,

determining when and how career academies facilitate children's academic performance and transition to work is an important next step.

Summary Points

- Intervention is necessary to improve outcomes for maltreated children.
- Career academies have been successful in the past. Further research can determine which features of career academies are most helpful and how they may be implemented to benefit more children.
- The short- and long-term effects of outside intervention in a maltreatment situation must be assessed. Research indicates that the effect of reporting child abuse to an outside agency may have negative effects, in and of itself, on school performance. Intervention that can protect children while not disrupt their learning needs to be developed and evaluated.
- Children's understanding of the purpose and methods of Child Protective Services (CPS) needs to be explored. Children may report abuse to CPS or to others, and yet they may have little concrete understanding of the reactions that will be prompted by disclosure.

Types of Child Maltreatment and CPS Reports

Although individual researchers have explained the rational behind their decisions to label children "at-risk," "maltreated," or "control" in particular studies, there is a growing need to determine the breadth of what should be labeled as "maltreatment," define more precisely the different forms of maltreatment, and identify better methods of assessing the prevalence of the various forms (Jeffrey Haugaard). For instance, although drawing distinctions between child sexual abuse and neglect may be less problematic, distinguishing between neglect and emotional abuse may be more difficult. Additionally, as Byron Egeland has argued, emotional unavailability of caregivers may be a particularly devastating form of maltreatment, despite it not typically being classified as such.

Relying on documented and/or substantiated occurrences of maltreatment (e.g., CPS reports) severely limits the conclusions that can be reliably drawn from research. Although a case may have involved multiple forms of maltreatment, only one form may be included in the legal records. Cases may be labeled unsubstantiated for a variety of reasons: The maltreatment may not have occurred, there might be insufficient evidence to pursue a case, a child might not be compliant with an investigation (e.g., a child may deny abuse for fear of losing a parent), or case overload may demand that less severe cases or cases with limited physical evidence be dropped. Additionally, the labeling of cases may be exaggerated or reduced to serve the needs of the investigators. For instance, if legal action is taken, it is likely that only the most severe form of abuse will be coded, though a great deal more of a less severe type of abuse may have taken place. Alternatively, investigators may attempt to secure the cooperation of the family by listing a less severe type of abuse than the one that actually occurred.

Research based on CPS reports is even further limited by the fact that most cases of abuse may never come to the attention of CPS. Self-report surveys suggest that only a minority of all abuse occurrences are ever reported to the authorities, indicating that the actual prevalence of different forms of abuse is substantially higher than that suggested by CPS report statistics.

Given the aforementioned considerations, it is imperative to find improved and more precise methods of defining and documenting the occurrence of different forms of maltreatment and determine the breadth of parental behaviors that constitute maltreatment. Investigations of the consequences of maltreatment demand a better understanding and better definition of the types of maltreatment to which children can be exposed. (Note that NICHD plans to fund some research in this area, but more research than they can fund may be needed.)

Summary Points

- Lack of standardization of terminology concerning types of child maltreatment (e.g., neglect, emotional abuse) acts as an impediment to understanding the effects of abuse.

- Different forms of parental practices that traditionally may not be considered abusive (e.g., emotional unavailability) must be included in child maltreatment research. These forms of parental behavior may be as harmful to the child psychologically as physical abuse.

- Some research has been conducted using case records from Child Protective Services (CPS). However, these case records are created in a far from systematic manner. A case may be labeled unsubstantiated even if abuse really occurred, or may be labeled as a misleadingly severe or mild form of abuse.

New Intervention Strategies

A clear message from the conference was the need for theory-based intervention strategies, both in terms of ameliorating the potentially deleterious consequences of child maltreatment and facilitating maltreated and other at-risk children's academic performance and transition from school to college or work. Research to assess maltreatment effects on the transition to work is essential in this regard. Once more is known about how maltreated children make the transition to work, then school-based intervention programs could be better designed, and their impact for maltreated and non-maltreated children could be compared.

Additionally, having a supportive relationship with an adult can serve as a buffer for children who are at-risk for violence, abuse, or neglect. The availability of positive attachment figures is believed to influence adjustment and well-being across the life span. It is important to develop intervention strategies that incorporate our understanding of the primary role of social relationships, and that act to maximize the chances for all children to find some form of social support and acceptance. These intervention programs should begin *early* in a child's life, well *before* school attendance (i.e., during the "zero to three" years). The development and evaluation of *theory-based* early intervention programs is desperately needed.

However, because almost all children attend school, and because children are at school for a good portion of their day, school is a valuable social setting and in many ways, an ideal place for later interventions to occur. In this regard, research is needed on how early interventions relate to later interventions. Moreover, some evidence suggests that maltreated children may sometimes spend more time than other children at school, viewing it as a "safe haven" from an unpleasant home situation. With the development of appropriate interventions, school could be much more than simply a temporary refuge from maltreatment; it could also be a springboard to a successful adulthood, and a happier life.

Success and happiness in adulthood is greatly dependent on vocational choices. As one of the main places in which children gain information about the world, schools are in an excellent position to provide children with information about various career options available to them. To make good decisions about their futures, children must have general information about the requirements and duties of different jobs. This learning process could begin earlier than high school, when career choice issues are commonly addressed.

Recent evidence indicates that vocational identity emerges much earlier in development than formerly believed, and may even precede and predict children's identity development more generally (Fred Vondracek). Even more basic than vocational identity is a sense of industry, a necessary precursor for successful work. Children can attain a sense of industry when they are very young, and there is some evidence that work can be a protective factor, allowing later success even in the face of abuse and risk (Emmy Werner). Additionally, the ability to see a broad range of choices and have a vision of life outside an abusive home situation can inspire and sustain children (Emmy Werner). Often, maltreated and other at-risk children lack sufficient knowledge about their opportunities (Catherine Ayoub, Robert Hampton). Important developments (e.g., of a sense of industry) that lead to the eventual development of vocational identity occur

in childhood. Consequently, intervention strategies that aim to foster successful vocational identity development in adolescence could be designed in such a way as to address its antecedents, namely, the development of industry in children. Improvements in vocational identity and work ethic can facilitate later well being and adjustment.

New vocational training techniques are designed to expose children to career opportunities, provide children with experience in a particular career, and promote interactive training (John Krumboltz). One such simulation training procedure, developed by John Krumboltz, provides such an experience for children. Using a computer and realistic work-related scenes, the virtual job training experience allows children to choose a job to investigate, and progress through some of the job's daily routines, making critical choices at many junctures along the way. Some of the benefits of this system are that it allows participants to obtain a realistic idea of what certain jobs entail, and to see how it is possible to accomplish something simply by working hard and persevering.

Summary Points

- Interventions should take place early, even before the school years; more theory-based research is needed on optimal early interventions and on how early interventions relate to later ones. *(We would be interested in holding a future NSF-funded conference on these themes.)*

- Schools offer an ideal opportunity for later intervention; children spend a great deal of time in school. As social settings and as learning institutions, schools have the potential to effect social and cognitive change.

- Interventions can be aimed at improving children's social skills, scholastic success, and/or career identification.

- Computer-assisted virtual job experiences may help children decide which careers they would like to pursue.

Concluding Remarks

Child maltreatment is a widespread social problem, one that incurs large costs both to society and to individuals. Abuse and neglect victims suffer from a distressingly wide variety of problems, including mental and physical health problems, cognitive impairments, and social deficits. Some or all of these problems can hamper school performance and later transition to the workforce. When children do poorly in school and then fail to transition successfully to a career, society pays a price, and the price is high. Lost person power, shortage of skilled workers, increased crime, and dependency on welfare can result.

Society must act to provide theoretically and empirically guided, and carefully evaluated, help to maltreated children before they enter school, but also in school, and to facilitate maltreated children's development of a positive self image, an appropriate work ethic, and positive vocational identity. These practical considerations may be directly related to improving maltreated children's mental state. Accomplishment in school and a positive vocational identity can potentially help counteract some of the other negative effects of maltreatment. Early interventions, including school-based ones, geared specifically to increasing maltreated children's academic achievement, positive attributional biases, and career aspirations will in the end foster optimal transition to the workforce and result in tremendous benefit to all.

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